

**ABSTRACT**

An active noise control system for controlling induction noise of an internal combustion engine having a speaker and a controller. The controller generates a control signal that drives the speaker, wherein the signal is based on at least one current vehicle operating condition. The signal is also based on a determination of a first sound pressure for each order of sound  
6 generated by the engine during a run up of the engine. In addition, the signal is based on a determination of a second sound pressure computed for each of a plurality of operating conditions of the engine, wherein the signal controls each of order of sound generated by the engine independently to drive the speaker to generate an audio output to control intake noise.